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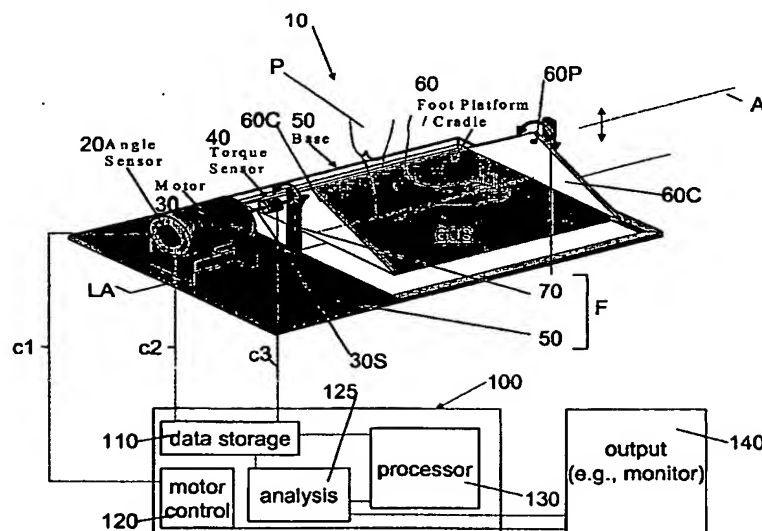
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(54) Title: MUSCULOSKELETAL DYNAMICS ASSESSMENT UNDER WEIGHT-BEARING CONDITIONS



(57) Abstract: In some illustrative embodiments, a method for the assessment of an ankle or the like includes: measuring musculoskeletal dynamics of an ankle or the like of a patient with the patient in a posture that is weight-bearing through the ankle or the like. In some embodiments, a device for assessing musculoskeletal dynamics of an ankle or the like of a patient in a weight-bearing posture can include: a platform to support a patient in a weight-bearing posture; a drive mechanism to impart pulse movement to the platform; a position sensor to sense a position of the platform; a force or torque sensor to sense a force or torque on the platform; a control system to determine musculoskeletal dynamics based on outputs from the displacement sensor and the force or torque sensor.